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EXAMINER

DAO, THUY CHAN

ART UNIT	PAPER NUMBER
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2192

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/751,333

Applicant(s)

SARUKKAI ET AL.

Examiner

Thuy Dao

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on December 7, 2006.
2. Claims 1-21 have been examined.

Priority

3. The application claims priority under Section 119 of US Provisional Application No. 60/437,441 (hereinafter '441) and 60/437,443 (hereinafter '443) filed on January 2, 2003.

However, '441 has only 3 pages of specification and 2 pages of drawings and '443 has only 2 pages of specification and 1 page of drawing, which merely are problem statements and solution description and thus, do not fully support the disclosure and limitations recited in claims of the instant application.

Accordingly, the priority date considered for this application is the filing date January 2, 2004.

Response to Amendments

4. Per Applicants' request, claims 2-21 have been added.

Response to Arguments

5. The Applicants are thanked for a thorough reply. Applicants' arguments filed on December 7, 2006 have been fully considered but are moot in view of the new grounds of rejection – see paragraphs 9 and 10.

Claim Rejections – 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2192

7. Claim 9 is rejected because the claimed invention is directed to non-statutory subject matter: *"A computer program embodied on a computer readable medium, the computer program comprising ..."*.

They amount to Functional Descriptive Material: "Data Structures" representing descriptive material per se or "Computer Programs" representing computer listings per se.

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. See MPEP 2106.01(I).

Under the principles of compact prosecution, claim 9 has been examined as the Examiner anticipates the claims will be amended to obviate these 35 USC § 101 issues. The claim has been treated as, for example, - - A computer program [[embodied on]] stored thereon a computer readable medium, when executed, causes the computer to perform a method for integrating run-time metrics into an integrated development environment (IDE), the IDE including a run-time environment and a user interface environment, the computer program comprising ... - -.

Claim Rejections – 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,801,940 B1 to Moran et al. (art made of record, hereinafter "Moran").

Claim 1:

Moran discloses a method, system, and computer program product for *integrating run-time metrics into an integrated development environment (IDE), the IDE including a runtime environment and a user interface environment (e.g., col.2: 7-14; FIGs. 3 and 4, col.5: 44 – col.8: 35), the method comprising:*

determining an application component to be monitored in the IDE, the application component having associated information in a component repository of the IDE runtime environment (e.g., col.30: 66 – col.31: 2; col.6: 61-67);

Art Unit: 2192

monitoring the application component in the IDE runtime environment to determine a plurality of metrics associated with the application component (e.g., FIG. 34, Application Expert 3408, col.35: 19-61);

transmitting the plurality of metrics to a data collector of the IDE user interface (e.g., col.52: 43 – col.53: 65); and

displaying the metrics to a user of the IDE (e.g., col.38: 56-61; col.40: 48-56; col.60: 31-36).

Claim 2 (new):

The rejection of claims 2 is incorporated. Moran also discloses *providing, to the user of the IDE, an alert notifying the user of an error condition generated by the application component in production (e.g., col.74: 16 – col.76: 17, sections Alarms, Alarm Processing ...).*

Claim 3 (new):

The rejection of claims 2 is incorporated. Moran also discloses *providing an alert comprises displaying, for the user, a list of alerts generated since a last login by the user (e.g., col.15: 26-33; col.19: 49-53).*

Claim 4 (new):

The rejection of claims 2 is incorporated. Moran also discloses *providing an alert comprises sending an alphanumeric page to the user (e.g., col.74: 51-67).*

Claim 5 (new):

The rejection of claims 1 is incorporated. Moran also discloses *providing a policy manager in the IDE to allow the user to specify an operational concern for the application component; communicating the specified operational concern to a policy agent in the IDE runtime environment; and enforcing the operational concern with the policy agent during operation of the application component (e.g., col.13: 15-25; col.18: 51-54; col.21: 18-22).*

Art Unit: 2192

Claim 6 (new):

The rejection of claims 5 is incorporated. Moran also discloses *the operational concern is selected from the group consisting of a logging policy, an authentication policy, an encryption policy, and a caching policy* (e.g., col.21: 43-46; col.49: 42-50).

Claim 7 (new):

The rejection of claims 1 is incorporated. Moran also discloses *allowing the user to create the application component in the IDE; and automatically registering the application component, when it has been created, with the component registry* (e.g., FIG. 23, block 2304, col.21: 18-35; col.56: 13-23, Operating modes, creating a baseline for a specific set of applications).

Claim 8 (new):

The rejection of claims 7 is incorporated. Moran also discloses *determining an application component to be monitored comprises: providing, from the component repository, a list of application components that can be invoked; and allowing the user of the IDE to specify an application component to be opened in the IDE runtime environment* (e.g., col.35: 19-61).

Claim 9 (new):

Claim 9 is a computer program version, which recites the same limitations as those of claim 1, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 9.

Claim 10 (new):

Moran discloses *a computer system comprising a processor and a computer readable medium, the computer readable medium having stored thereon a computer program executable by the processor, the computer program comprising:*

a component repository configured to maintain a list of available application components that can be invoked by an integrated development environment (IDE) runtime environment (e.g., col.30: 66 – col.31: 2; col.6: 61-67);

an IDE runtime environment configured to open an application component and monitor operation of the application component to determine a plurality of metrics associated with the application component (e.g., FIG. 34, Application Expert 3408, col.35: 19-61); and

an IDE user interface configured to allow a user to perform software development tasks, the IDE user interface comprising:

an instrumentor in communication with the IDE runtime environment, the instrumentor being configured to allow a user to control operation of the IDE runtime environment (e.g., col.52: 43 – col.53: 65; FIG. 4, col.6: 5-30); ; and

a data collector in configuration with the IDE runtime environment, the data collector being configured to display at least some of the plurality of metrics associated with the application component (e.g., col.38: 56-61; col.40: 48-56; col.60: 31-36; FIG. 17, Stats Manager 1708, Logging Manager 1706, col.15: 56 – col.16: 10; col.16: 56-67).

Claim 11 (new):

The rejection of claims 10 is incorporated. Moran also discloses *the IDE runtime environment comprises the component registry (e.g., col.16: 2-46).*

Claim 12 (new):

The rejection of claims 10 is incorporated. Moran also discloses *the IDE user interface comprises a monitor, and wherein the monitor comprises the instrumentor and the data collector (e.g., FIG. 16, UI Servers 1510, col.15: 26-37).*

Claim 13 (new):

The rejection of claims 11 is incorporated. Moran also discloses *the IDE user interface further comprises a policy manager configured to allow the user to specify an*

Art Unit: 2192

operational concern for the application component, and wherein the IDE runtime environment comprises a policy agent in communication with the policy manager, the policy agent being configured to receive the operational concern from the policy agent and enforce the operational concern during operation of the application component (e.g., col.13: 15-25; col.18: 51-54; col.21: 18-22).

Claim 14 (new):

The rejection of claims 10 is incorporated. Moran also discloses *the IDE runtime environment comprises: a listener in communication with the instrumentor, the listener being configured to receive instructions from the instrumentor for controlling operation of the IDE runtime environment; and a sender in communication with the data collector, the sender being configured to translate events generated by the operation of the application component into messages, and to send the messages to the data collector (e.g., FIG. 15, col.14: 62 – col.15: 24).*

Claim 15 (new):

The rejection of claims 10 is incorporated. Moran also discloses *allow the user to create an application component in the IDE user interface; and automatically register the application component, when it has been created, with the component registry (e.g., FIG. 23, block 2304, col.21: 18-35; col.56: 13-23, Operating modes, creating a baseline for a specific set of applications).*

Claim 16 (new):

The rejection of claims 10 is incorporated. Moran also discloses *the instrumentor is configured to allow a user to control operation of the IDE runtime environment by specifying a particular application component that should be monitored (e.g., col.35: 19-61).*

Claim 17 (new):

Art Unit: 2192

The rejection of claims 10 is incorporated. Moran also discloses *the instrumentor is configured to allow a user to control operation of the IDE runtime environment by setting a context for the application component to be monitored (e.g., col.13: 15-25; col.18: 51-54; col.21: 18-22).*

Claim 18 (new):

The rejection of claims 17 is incorporated. Moran also discloses *the metrics displayed by the data collector are related to the context specified by the instrumentor (e.g., col.38: 56-61; col.40: 48-56; col.60: 31-36).*

Claim 19 (new):

The rejection of claims 10 is incorporated. Moran also discloses *the IDE runtime environment is configured to monitor application components in a production environment (e.g., col.21: 43-46; col.49: 42-50).*

Claim 20 (new):

The rejection of claims 19 is incorporated. Moran also discloses *the component repository is configured to maintain a list of available application components that can be invoked either in the production environment or in a development environment (e.g., col.56: 19-23).*

Claim 21 (new):

The rejection of claims 10 is incorporated. Moran also discloses *the IDE user interface communicates with the IDE runtime environment using one or more protocols selected from the group consisting of the simple object access protocol ("SOAP"), the java message service, and remote method invocation (e.g., col.15: 14-25; col.38: 49).*

10. Claims 1, 9, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 7,016,953 B2 to Lemon (art made of record, hereinafter "Lemon").

Claim 1:

Lemon discloses a method, system, and computer program product for *integrating run-time metrics into an integrated development environment (IDE), the IDE including a runtime environment and a user interface environment (e.g., col.2: 7-14; FIGs. 3 and 4), col.5: 44 – col.8: 35), the method comprising:*

determining an application component to be monitored in the IDE, the application component having associated information in a component repository of the IDE runtime environment (e.g., FIGs. 2-4, col.7: 38-51; col.6: 23-42);

monitoring the application component in the IDE runtime environment to determine a plurality of metrics associated with the application component (e.g., FIGs. 3-7, HTTP Transaction Monitor; col.6: 52-60);

transmitting the plurality of metrics to a data collector of the IDE user interface (e.g., FIGs. 4 and 6, Session Properties; col.10: 24-46; col.12: 28-39); and

displaying the metrics to a user of the IDE (e.g., FIG. 3-7, Forte for JAVA.TM. IDE, col.12: 28-39 and 42-59; col.9: 62 – col.10: 20).

Claim 9 (new):

Claim 9 is a computer program version, which recites the same limitations as those of claim 1, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 9.

Claim 10 (new):

Lemon discloses a *computer system comprising a processor and a computer readable medium, the computer readable medium having stored thereon a computer program executable by the processor, the computer program comprising:*

a component repository configured to maintain a list of available application components that can be invoked by an integrated development environment (IDE) runtime environment (e.g., FIGs. 2-4, col.7: 38-51; col.6: 23-42);

an IDE runtime environment configured to open an application component and monitor operation of the application component to determine a

Art Unit: 2192

plurality of metrics associated with the application component (e.g., FIGs. 3-7, HTTP Transaction Monitor; col.6: 52-60); and

an IDE user interface configured to allow a user to perform software development tasks, the IDE user interface comprising:

an instrumentor in communication with the IDE runtime environment, the instrumentor being configured to allow a user to control operation of the IDE runtime environment (e.g., FIGs. 4 and 6, Session Properties; col.10: 24-46; col.12: 28-39); and

a data collector in configuration with the IDE runtime environment, the data collector being configured to display at least some of the plurality of metrics associated with the application component (e.g., FIG. 3-7, Forte for JAVA.TM. IDE, col.12: 28-39 and 42-59; col.9: 62 – col.10: 20).

Conclusion

11. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2192

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



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SUPERVISORY PATENT EXAMINER